

## 1994 TRIP GENERATION WORKSHEET - Page 1 of 3

The Trip Generation Worksheet calculates the trips generated within the planning area. It also allocates trips to the proper traffic flow totals (ie. Internal>External trips, Internal<>Internal trips) in order to develop trip tables and make assignments to the existing street system. \*The highlighted areas require an input.

Step 1: Estimate the trips generated by the population and development within the planning area.  
Population is converted into dwelling units and then multiplied by the trip generation rate.  
Commercial automobile and truck trips are then estimated and added to this total.

Population	
1993 Population of Whiteville:	5,513
1993 Population of Brunswick:	299
Total:	5,812
1994 Est. Whiteville Population:	5,690
1994 Est. Brunswick Population:	310
Total:	6,000

### DWELLING UNIT TRIPS

1994 Brunswick & W'ville Population (POP):	6,000
1970-1994 Growth Factor (GR):	1.19
1994 Trip Generation Factor/DU (DUTG):	7.00
1994 Whiteville City Person/DU (PDU):	2.40
1994 Planning Area Population:	9,978
1994 # DU's in Planning Area:	4,158

The 1994 Trip Gen. Factor/DU was chosen by KDH based on Technical Report #11. The values for persons/DU were based on the 1990 Whiteville Township value and adjusted for the year 1994 and the planning area. The 1994 planning area population was obtained by multiplying the total # of houses outside of the city limits, but within the planning area, by the # of persons/DU and adding the product to the Whiteville/Brunswick population. The total # DU's in the planning area was obtained by dividing the total city population by the # of persons/DU and adding this # to the total # of rural DU's.

TABLE 1 gives a breakdown of the number of Dwelling Units by zone (outside the city limits of Whiteville/Brunswick but inside the planning area) and calculates the trips generated. The number of houses outside the city limits was taken from the 1987 USGS quad maps, and are considered rural. The growth factor (GR) is used to bring the 1987 DU's up to date with the 1994 base year.

TABLE 2 calculates trips generated within the city limits from the population and person/DU factor. The population is placed into traffic zones by percentages through estimation.